EXECUTIVE SUMMARY

2018 was a year full of challenges in our global fight against measles and rubella.

With global rates of first dose measles vaccine coverage stagnating at 86% and second dose vaccine coverage at only 69%, it is no surprise that we saw measles outbreaks worldwide. It was a painful reminder that without 95% coverage with two doses of measles vaccines, measles virus once introduced into a community will spread to anyone who is not vaccinated or previously immune.

We saw large measles outbreaks in the Democratic Republic of the Congo, Georgia, Kazakhstan, Kyrgyzstan, Madagascar, the Philippines and Ukraine, resulting in over 353,000 cases worldwide in 2018, double the number of cases in 2017 (173,457). Tragically, Venezuela had measles virus introduction in 2017 with spread to six other South American countries. Because the virus strain circulated for more than a year in Venezuela and Brazil, both countries lost their measles elimination status, and the Region of the Americas consequently lost its measles elimination status. Now none of the WHO Regions are considered to have eliminated measles- a far cry from the Global Vaccine Action Plan objective of reaching elimination in five of the six WHO Regions by 2020.

Moreover, the United States, with a measles outbreak that started in 2018, is at risk of losing its elimination status if the same virus strain is still circulating in October 2019. The U.S. outbreak, with more than 1,000 cases in 2019, highlights the importance of ensuring that even in countries with high vaccine coverage rates communities with less than 95% coverage with two doses of measles vaccine can suffer from measles outbreaks.

Although reasons for poor vaccine coverage vary, lack of access to vaccine is the central reason why we are now seeing outbreaks across the world. The majority of children who miss out on lifesaving vaccines live in poor, marginalized communities, which may be affected by insecurity and conflict or live in urban slums or remote rural areas where health services are limited. Access to ALL vaccines – including measles - is a human right that requires urgent action on the part of global, regional, and national health authorities.

At the same time, in countries where there is good vaccine access, other barriers have led to "vaccine hesitancy". This uncertainty or reluctance can be caused by many factors, including the quality or cost of healthcare services, complacency about diseases that have become uncommon, and concerns about vaccine safety fueled, in some cases, by the spread of misinformation about vaccines. We need to do a much better job understanding the causes of vaccine hesitancy and assuring that health care workers and caregivers have the information they need to make sound decisions about vaccination.

Measles outbreaks are a wake-up call and show that the world cannot go on just doing more of the same. It's time for a new commitment to truly ensure that no child is left behind - through broadbased social movements for vaccines, and universal, high-quality primary care that has immunization at its heart.

The Measles & Rubella Initiative (M&RI) and its partners continue their steadfast commitment to end measles and rubella.

The Measles & Rubella Initiative remains committed to protecting children around the world. Each of the five founding partners (American Red Cross, CDC, UN Foundation, UNICEF, and WHO) and partners such as Gavi, the Vaccine Alliance and the Bill and Melinda Gates Foundation (BMGF) continue to provide their resources and unique expertise to achieve a world without measles, rubella, and congenital rubella syndrome. Since the Initiative's creation in 2001, the founders and partners have collectively raised and invested over \$1.2 billion to support the immunization of over two billion children against measles. Gavi, alone, has provided over \$1 billion for measles and rubella for low-income countries since 2004. The collective efforts have saved 21.1 million lives from 2000 to 2017.

In addition

 In Madagascar, the M&RI launched an outbreak response in which 2.1 million children were vaccinated against measles, with funding

- support from Gavi. The M&RI also provided outbreak support in Brazil, Burkina Faso, Chad, Colombia, Pakistan, the Philippines, Sudan, and Venezuela.
- The M&RI, in partnership with the Prince Alwaleed Philanthropies, contributed financial and technical resources to improve measles immunization coverage and prevent measles outbreaks. The support was given to the Central African Republic, Ethiopia, Indonesia, Iraq, Nepal, Liberia, the Philippines, South Sudan, Sudan, Sierra Leone, and Ukraine.
- In Ukraine, the M&RI helped set up the National Immunization Technical Advisory Group, which is playing a pivotal role in the country's ongoing measles outbreak response.
- In Ghana, Kenya, Mozambique, and Nigeria, the M&RI trained and mobilized over 4,000 Red Cross volunteers to conduct social mobilization. These volunteers reached more than 1.2 million households to encourage caregivers to get their children vaccinated.
- The M&RI provided technical support to plan and implement measles campaigns in Angola, Burundi, Cape Verde, Cote d'Ivoire, Djibouti, Eritrea, Ghana, India, Indonesia, Liberia, Mauritania, Mozambique, Nigeria, Pakistan, Sierra Leone, and Togo, and supported postcampaign coverage surveys in Angola, Eritrea, Ghana, Indonesia, Nigeria, Pakistan, and Togo.
- In collaboration with Facebook and Twitter, 40 people from Bangladesh, Bosnia and Herzegovina, Ethiopia, India, Kenya, Nigeria, the Philippines, Romania, Uganda, and Ukraine were trained by the M&RI on the use of digital/social media to power vaccination campaigns. Digital technology was also used in Indonesia and Pakistan for real time measles campaign monitoring, including those in the hardest to reach areas. Approximately, 17 million people were reached in Pakistan through this technology.
- In middle-income countries, the M&RI provided nearly \$500,000 to develop tools and conduct workshops to support measles elimination.
- With M&RI support, independent measles rubella regional verification commissions have now been established in all Regions, most recently in the African and Eastern Mediterranean Regions.
- The M&RI's Global Measles and Rubella Laboratory Network tested over 275,000 measles samples and more than 200,000 rubella samples. Measles virus genotyping by the Network showed that of the nine measles genotypes circulating in 2008, only five now

- circulate. This is evidence of the progress being made in the fight against measles.
- The M&RI was key to driving research to ensure the best tools are available to achieve a measles- and rubella-free world. Each year, the M&RI provides \$2-3 million for measles research globally, including to a project cofunded by BMGF on a new measles-rubella vaccine delivered through a "micro-needle" patch. The M&RI is also working with Public Health England to pilot a new "point-of-care" test that uses a single drop of blood to immediately confirm the diagnosis of measles, enabling an immediate outbreak response.
- The M&RI continued to leverage its convening role, private sector fundraising, and communications expertise to help further measles elimination goals. Calls were made for renewed political commitment and continued financing to help combat ongoing measles outbreaks through the media and with U.S. members of Congress.

The way forward

A global priority to achieve health and well-being for all must ensure that every child everywhere is vaccinated on time, every time through:

- Investment in strong routine immunization systems and primary health care
- Accurate information on the safety and benefits of vaccines and the severity of the diseases they prevent
- Well-trained health workers who are ready to recommend vaccination and respond to community questions or concerns
- Local community influencers supported and engaged to build trust in vaccines

Individuals can also do their part by making sure their families and communities are always up to date on their vaccinations and by talking to people about the lifesaving benefits of vaccines.

The Measles & Rubella Initiative Partners

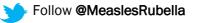






For more information:

www.MeaslesRubellaInitiative.org





2018 ANNUAL SUMMARY













2018 IN NUMBERS

116,585,279 children received the 1st dose of the measles vaccine in 194 countries for 86% global coverage



168 countries (87%)provided rubella vaccines in their immunization schedule

UNICEF procured and delivered 373,590,450 doses of measles vaccines on behalf of 84 countries

109 countries had >90% immunization coverage for the 1st dose of the measles vaccine

171 countries (88%)introduced a 2nd dose of the measles vaccine in their immunization schedule





275,768

specimens

were tested for

measles

vaccinated against measles using Gavi funds during outbreak response (2012-2018)

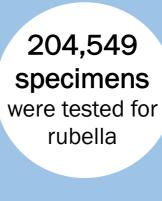
54 million

The Region of the Americas maintained rubella and congenital

rubella syndrome

elimination

rubella





4,054 volunteers mobilized by the American Red Cross reached **1,234,839** households in 4 countries

10 countries delivered additional health interventions, including deworming, polio and Vitamin A during measles campaigns

37 countries vaccinated nearly 350 million children during 45 supplemental immunization activities with M&RI support

